

I CLAIM:

1. A structural member for a boat, comprising
  - at least two complementary parts configured to be joined along two or more longitudinal seams, the parts each being formed in at least one female mold defining an exterior of the structural member; and
    - for each seam, a seam anchor strip comprising substantially opposed channels each defined between an exterior flange and an interior flange,
      - whereby each seam is joined along the seam anchor strip by an adhesive, to produce an integral structural member.
2. The structural member of claim 1 in which the flanges are provided with teeth for lateral engagement of an adhesive used to secure the edges of the complementary parts.
3. The structural member of claim 1 in which one or more of the seam anchor strips is provided with an external profile for affixing another element to the seam anchor strip.
4. The structural member of claim 3 in which the profile is a track.
5. The structural member of claim 4 in which the structural member is a mast and the track slidably receives lanyard hardware.
6. The structural member of claim 2 in which the adhesive comprises methacrylate.
7. The structural member of claim 1 in which the seam anchor strips are extruded.
8. The structural member of claim 1 in which the parts are mast halves.
9. A mast for a sailboat, comprising

at least two complementary parts configured to be joined along two or more longitudinal seams, the parts each being formed in at least one female mold defining an exterior of the mast; and

for each seam, a seam anchor strip comprising substantially opposed channels each defined between an exterior flange and an interior flange, one of the seam anchor strips being provided with an external profile comprising a track for slidably receiving rigging hardware,

whereby each seam is joined along the seam anchor strip by an adhesive, to produce an integral structural member.

10. The structural member of claim 9 in which the flanges are provided with teeth for lateral engagement of an adhesive used to secure the edges of the complementary parts.

11. A method of manufacturing a structural member, comprising the steps of:

a. Placing resin-impregnated fabric into at least one female mold to create complementary parts of the structural member, up to a desired thickness, for joining along at least two seams;

b. When the parts have cured, removing the parts from the mold and joining one of the at least two seams by applying adhesive and substantially opposed channels in a seam anchor strip over complementary edges of the one seam;

c. When the adhesive has set, testing the structural member for deflection, and if the deflection testing indicates that the structural member has not achieved a desired deflection resistance, applying further resin-impregnated fabric along an interior surface of the structural member;

d. Once the structural member has achieved the desired deflection resistance, applying adhesive and substantially opposed channels in a seam anchor strip over complementary edges of the other of the at least two seams to complete the assembly of the structural member.

12. The method of claim 11 including, at any time after step b., the additional step of applying one or more further layers of resin-impregnated fabric over an interior of the seam anchor strip and overlapping a portion of an interior surface of each of the structural member parts.
13. The method of claim 12 wherein one or more further layers of resin-impregnated fabric is applied over an interior of the seam anchor strip through a gap between parts at an unjoined seam.
14. The method of claim 12 wherein one or more further layers of resin-impregnated fabric is applied over an interior of the seam anchor strip by drawing resin-impregnated fabric through an open end of the structural member and pressing same against interior of the seam anchor strip and a portion of an interior surface of each of the structural member parts.
15. The method of claim 11 including, before step a., the step of coating the one or more molds with one or more layers of a finishing paint.
16. The method of claim 11 in which the opposing channels are provided with teeth for lateral engagement of an adhesive used to secure the edges of the complementary parts.
17. The method of claim 11 in which one or more of the seam anchor strips is provided with an external profile for affixing another element to the seam anchor strip.
18. The method of claim 17 in which the structural member is a mast and the profile is a track for slidably receiving lanyard hardware.
19. The method of claim 11 in which the adhesive comprises methacrylate.
20. The method of claim 11 in which the resin-impregnated fabric has a fibre direction, some of the resin-impregnated fabric being oriented in a radial direction and some of the resin-impregnated fabric being oriented in an axial direction.